

REMARKS

The Examiner has maintained the rejections of previously presented Claims 1-13, 15 and 16 as set forth in the previous Office Action. Claim 17 has been allowed. Claim 14 has been objected to as being dependent upon a rejected base claim.

In the interview summary for the October 22, 2003, telephone interview with Robert T. Conway, Attorney for Applicants, the Examiner acknowledged that "because Claim 14 is independent and has been recognized as having allowable subject matter, the claim should have a status of 'allowed'." Thus, both Claims 14 and 17 should have a status of "allowed."

Applicant has amended Claims 8, 12, 13, and 15 to include the step of heating the strip to a temperature in the range of between 100°C and 180°C. For example, Claim 8 has been amended to include the step of heating the strip to a temperature in the range of between 100°C and 180°C to deblock the blocked isocyanate and cure the isocyanate urethane system. Support for these amendments can be found in the Detailed Description at page 7, lines 6-17 and throughout the application as originally filed.

Claims 9-11 have been amended for consistency with amended Claim 8. Support for these amendments can be found throughout the application as originally filed.

New Claims 18-21 and 23 are variously dependent on amended Claims 8, 13, or 15. New Claim 22 is dependent on allowed Claim 14. Support for these new claims can be found throughout the application as originally filed.

No new matter has been introduced by the above-described claim amendments and new dependent claims.

Applicant has canceled Claims 1-7, thus alleviating the Examiner's rejection of those claims.

The Examiner has maintained the rejection of previously presented Claims 8-13 and 15-16 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,919,549 to Van, *et al.*, (hereinafter referred to as "Van") in view of U.S. Patent No. 4,803,257 to Goel (hereinafter referred to as "Goel"). The Examiner states that Van discloses abrasive belts that include endless belts made by cutting strips of abrasive material, applying a urethane or other splicing adhesive, joining the ends of the strips, and heating the belt. The Examiner further states that Van does not specify the type of adhesive used as a splicing adhesive. According to the Examiner, Goel

teaches a polyurethane adhesive composition comprising a mixture of a polyisocyanate blocked with a phenolic compound and a polyamine curing agent. Because Goel is said by the Examiner to disclose a conventional polyurethane adhesive for flexible materials including fabric, it is the Examiner's position that it would have been *prima facie* obvious to use the adhesive of Goel in the abrasive belts of Van to form a bond from an adhesive having improved flexibility, toxicity, moisture resistance, and strength.

Applicant has amended independent Claims 8, 12, 13, and 15 to include the step of heating the strip to a temperature in the range of between 100°C and 180°C. For example, Claim 8 has been amended to include the step of heating the strip to a temperature in the range of between 100°C and 180°C to deblock the blocked isocyanate and cure the isocyanate urethane system.

Van does not teach or suggest methods for the formation of coated adhesive belts using a blocked isocyanate urethane system wherein the isocyanate of the system consists essentially of blocked isocyanate, as stated in the present claims. Van does not teach or suggest heating a coated abrasive strip to a temperature in the range of between 100°C and 180°C as described in amended independent Claims 8, 12, 13, and 15, for example, to deblock the blocked isocyanate and cure the isocyanate urethane system. Nor does Van teach or suggest the advantages that can be gained by practice of the present invention, *e.g.*, improved pot life of an isocyanate urethane system, reduced sensitivity of the system to the humidity of ambient air, and consistent belt joint quality. Thus, Van does not teach or suggest the claimed invention, as amended.

Goel does not teach coated abrasive belts or methods for forming coated abrasive belts. Goel does not teach or suggest heating a coated abrasive strip to a temperature in the range of between 100°C and 180°C, for example, to deblock a blocked isocyanate and cure a isocyanate urethane system. For example, Goel does not teach a method for forming a coated abrasive belt comprising (a) providing a coated abrasive strip having first and second opposed ends; (b) joining the ends of the strip with an adhesive formed from a blocked isocyanate urethane system wherein the isocyanate of said system consists essentially of blocked isocyanate; and (c) heating the strip to a temperature in the range of between 100°C and 180°C to deblock the blocked isocyanate and cure the isocyanate urethane system, as is stated in amended Claim 8. Nor does Goel teach a method for forming a coated abrasive belt comprising (a) forming a blocked isocyanate urethane system by mixing a first component with a second component wherein the isocyanate of said system consists essentially of blocked isocyanate; (b) joining ends of a strip of

coated abrasive with the blocked isocyanate urethane system; and (c) heating the strip to a temperature in the range of between 100°C and 180°C to cure the blocked isocyanate urethane system, as is stated in amended Claim 15.

Van, as acknowledged by the Examiner, does not specify the type of adhesive to be used as a splicing adhesive. Neither Goel nor Van teach or suggest heating a coated abrasive strip to a temperature in the range of between 100°C and 180°C. Goel does not provide any teaching or suggestion that the adhesive systems described therein must be heated to a temperature in the range of between 100°C and 180°C, nor does Goel provide any teaching or suggestion that the adhesive systems described therein can be heated to a temperature in the range of between 100°C and 180°C. Van does not correct these deficiencies of Goel.

Since neither Van nor Goel, alone or in combination, teaches or suggests the claimed invention as amended, amended independent Claims 8, 12, 13, and 15 (and amended Claims 9-11, Claim 16 and new Claims 18-21 and 23, dependent thereon) are patentable over Van in light of Goel. Therefore, Applicants request allowance of amended and new Claims 8-13, 15-16, 18-21 and 23.

CONCLUSION

In view of the above amendments and remarks, it is believed that all present claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner believes that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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